

Common Alerting Protocol (CAP) based Emergency Alerts using the Session Initiation Protocol (SIP)

draft-ietf-ecrit-data-only-ea-02

Status

- Marc stated WGLC on **draft-ietf-ecrit-data-only-ea-01.txt**
- Martin Thomson, James Winterbottom, Marc Linsner, Shida Schubert, and Bernard Aboba provided feedback.
- In the subsequent mailing list discussions we ran into **two issues**.

Issue #1: CAP Usage for Data Only Emergency Calls

- Data-only emergency alerts are similar to regular emergency calls since they require emergency call routing functionality and may even have the same location requirements.
- On the other hand, the initial communication interaction will not lead to the establishment of a voice or video channel.
- draft-ietf-ecrit-data-only-ea uses CAP to convey data about the emergency call.
 - Does CAP provide anything useful that INVITE with Call-Info with Additional Data doesn't provide?
 - Keep in mind that we are using CAP outside it's originally attended purpose.

Alert Example

```
<alert xmlns="urn:oasis:names:tc:emergency:cap:1.1">
  <identifier>S-1</identifier>
  <sender>sip:sensor1@domain.com</sender>
  <sent>2008-11-19T14:57:00-07:00</sent>
  <status>Actual</status>
  <msgType>Alert</msgType>
  <scope>Private</scope>
  <incidents>abc1234</incidents>
  <info>
    <category>Security</category>
    <event>BURGLARY</event>
    <urgency>Expected</urgency>
    <certainty>Likely</certainty>
    <severity>Moderate</severity>
    <senderName>SENSOR 1</senderName>
    <parameter>
      <valueName>SENSOR-DATA-NAMESPACE1</valueName>
      <value>123</value>
    </parameter>
    <parameter>
      <valueName>SENSOR-DATA-NAMESPACE2</valueName>
      <value>TRUE</value>
    </parameter>
  </info>
</alert>
```

alert
Message ID (identifier)
Sender ID (sender)
Sent Date/Time (sent)
Message Status (status)
Message Type (msgType)
Source (source)
Scope (scope)
Restriction (restriction)
Addresses (addresses)
*Handling Code (code) **
Note (note)
Reference IDs (references)
Incident IDs (incidents)

info
Language (language)
Event Category (category) *
Event Type (event)
*Response Type (responseType) **
Urgency (urgency)
Severity (severity)
Certainty (certainty)
Audience (audience)
*Event Code (eventCode) **
Effective Date/Time (effective)
Onset Date/Time (onset)
Expiration Date/Time (expires)
Sender Name (senderName)
Headline (headline)
Event Description (description)
Instructions (instruction)
Information URL (web)
Contact Info (contact)
*Parameter (parameter) **

Elements in **boldface** are mandatory; elements in *italics* have default values that will be assumed if the element is not present; asterisks (*) indicate that multiple instances are permitted.

resource
Description (resourceDesc)
MIME Type (mimeType)
File Size (size)
URI (uri)
Dereferenced URI (derefUri)
Digest (digest)

area
Area Description (areaDesc)
*Area Polygon (polygon) **
*Area Circle (circle) **
*Area Geocode (geocode) **
Altitude (altitude)
Ceiling (ceiling)



Model

"alert" Element and Sub-elements

- <identifier>: The identifier of the alert message
- <sender>: The identifier of the sender of the alert message
- <sent>: The time and date of the origination of the alert message
- <status>: The code denoting the appropriate handling of the alert message. Code Values:
 - “Actual” - Actionable by all targeted recipients
 - “Exercise” - Actionable only by designated exercise participants; exercise identifier should appear in <note>
 - “System” - For messages that support alert network internal functions.
 - “Test” - Technical testing only, all recipients disregard
 - “Draft” – A preliminary template or draft, not actionable in its current form.
- <msgType>: The code denoting the nature of the alert message. Code Values:
 - “Alert” - Initial information requiring attention by targeted recipients
 - “Update” - Updates and supercedes the earlier message(s) identified in <references>
 - “Cancel” - Cancels the earlier message(s) identified in <references>
 - “Ack” - Acknowledges receipt and acceptance of the message(s) identified in <references>
 - “Error” indicates rejection of the message(s) identified in <references>; explanation SHOULD appear in <note>

"alert" Element, cont.

- `<source>`: The text identifying the source of the alert message. The particular source of this alert; e.g., an operator or a specific device.
- `<scope>`: The code denoting the intended distribution of the alert message. Code Values:
 - “Public” - For general dissemination to unrestricted audiences
 - “Restricted” - For dissemination only to users with a known operational requirement (see `<restriction>`, below)
 - “Private” - For dissemination only to specified addresses (see `<address>`, below)
- `<restriction>`: The text describing the rule for limiting distribution of the restricted alert message
- `<addresses>`: The group listing of intended recipients of the private alert message
- `<code>`: The code denoting the special handling of the alert message
- `<note>`: The text describing the purpose or significance of the alert message
- `<references>`: The group listing identifying earlier message(s) referenced by the alert message
- `<incidents>`: The group listing naming the referent incident(s) of the alert message

"info" Element and Sub-elements,

message: Code Values (inc. flood)

- "Safety" - General emergency and public safety
- "Security" - Law enforcement, military, homeland and local/private security
- "Rescue" - Rescue and recovery
- "Fire" - Fire suppression and rescue
- "Health" - Medical and public health
- "
- Env
- "Infra" - Utility, telecommunication, other non-transport infrastructure
- "CBRNE" - Chemical, Biological, Radiological, Nuclear or High-Yield Explosive threat or attack
- "CBRNE" - Chemical, Biological, Radiological, Nuclear or High-Yield Explosive threat or

message:
<event>: The text denoting the type of the subject event of the alert

message

"info" Element, cont.

- <responseType>: The code denoting the type of action recommended for the target
 - <
 - “Prepare” – Make preparations for the <instruction>
 - “Execute” – Execute a pre-planned activity identified in <instruction>
 - “Monitor” – Attend to information sources as described in <instruction>
 - “Assess” – Evaluate the information in this message. (This value SHOULD NOT be used in public warning applications.)
 - “None” – No action recommended
- “Monitor” – Attend to information sources as described in <instruction>
 - “Assess” – Evaluate the information in this message. (This value SHOULD NOT be used in public warning applications.)
 - “None” – No action recommended
- <urgency>: The code denoting the urgency of the subject event of the alert message. Code Values
 - “Immediate” - Responsive action SHOULD be taken immediately
- <severity>: The code denoting the severity of the subject event of the alert message. Code Values
 - “Future” - Responsive action SHOULD be taken in the near future
 - “Past” - Responsive action is no longer required
 - “Unknown” - Urgency not known
- <severity>: The code denoting the severity of the subject event of the alert message. Code

"resource" Element and Sub-elements

- `<resourceDesc>`: The text describing the type and content of the resource file. The human-readable text describing the content and kind, such as "caption" or "photo," or the content type and kind, such as "map" or "text" of the resource file.
- `<size>`: The integer indicating the size of the resource file
- `<minType>`: The identifier of the hyperlink for the resource file and sub-type describing the resource file
- `<uri>`: The identifier of the hyperlink for the resource file computed from the resource file

"area" Element and Sub-elements

- `<areaDesc`
 `areaDesc`
 `>`: The text describing the affected
location for the alert message using various
 `geoCode`

Issue #2: Messaging

- Is INVITE the only message it can be attached to?
 - Current draft version allows CAP payload to be attached to various messages.
- How to communicate an error (if the recipient does not support certain functionality)?